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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,873	12/31/2001	Joseph Cleveland	SAMS01-00160	6426
7590	06/28/2005		EXAMINER	
NOVAKOV DAVIS & MUNCK 900 THREE GALLERIA TOWER 13155 NOEL ROAD DALLAS, TX 75240				TSE, YOUNG TOI
		ART UNIT		PAPER NUMBER
		2637		

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/038,873	CLEVELAND ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	YOUNG T. TSE	2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 31 December 2001.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-22 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 31 December 2001 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: on page 35, line 18, "301" should be "301A"; on page 36, line 2 and line 7, "301" should be "301B"; on page 36 (lines 12 and 17) and page 40 (lines 10, 14, 17, 19-20 and 22), "Appendices A-E" is not understood since none of the appendices is included in the specification.

Appropriate correction is required.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

3. Claims 1-22 are objected to because of the following informalities: in claim 1, lines 8-9 and 29, "[+1,+1]", "[-1,-1]" and "[+1,+1]" are suggested to change to "(+1,+1)", "(-1,-1)" and "(+1,+1)". Also suggest the changes to claims 2-4, 10-13, and 19-22. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 10, and 19, "S", "M", and "N" are undefined, wherein dependent claims 2-9, 11-18, and 20-22 depend upon claims 1, 10, and 19, respectively.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-22 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-22 of copending Application No. 10/038,869. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant

application are claiming common subject matter, as follows: Although claims 1-22 of the instant application uses logic 00 and 01 input detectors and logic 00 and 01 switch array each comprising S switches instead of using logic 0 and 1 input detectors and logic 0 and 1 switch arrays each comprising S switches over the copending Application No. 10/038,869 in a demodulator, the performance and operation of the detectors and switch arrays are still the same over the two application because the instant application uses two-bit input and the copending application uses one-bit input for the demodulator. Clearly, in the instant application, the first two of the four modulation of the demodulator performs the same function as modulation of the one-bit modulator in the copending application.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

#### ***Allowable Subject Matter***

8. Claims 1-22 would be allowable if rewritten or amended to overcome the objections, the rejection(s) under 35 U.S.C. 112, 2nd paragraph, and to submit a terminal disclaimer to overcome the provisionally rejection under the judicially created doctrine of double patenting over claims 1-22 of copending Application No. 10/038,869, set forth in this Office action.

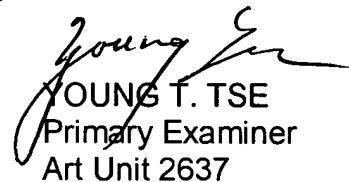
9. The following is a statement of reasons for the indication of allowable subject matter: Haines discloses a demodulator circuit comprising clock delay lines and a switch enable signal to enable one of a plurality of switches to generate a demodulated signal. However, the prior art fails to show or suggest a demodulator comprises the combination of a storage array capable of storing S code masks associated with S orthogonal modulation codes, wherein each of the S code masks, comprises M/2 code mask bits and each of the M/2 code mask bits is associated with a corresponding one of sequential pairs of M binary bits in one of the orthogonal modulation codes and orthogonal control circuitry capable of synchronously applying the code mask bits a Kth one of the S code masks in a storage array as a switch control signal to a Kth switch in a Logic 00 switch array such that a Logic 1 code mask bit in the Kth code mask closes the Kth switch in the Logic 00 switch array whenever a Logic 00 input detector sequential pair of the M binary bits equal thereby connecting the (+1,+1) output signals of the Logic 00 input detector to the first input of a kth accumulator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday and Wednesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

However, starting July 15, 2005, the Central FAX Number will change to (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
YOUNG T. TSE  
Primary Examiner  
Art Unit 2637